

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF INTENT TO MODIFY A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No.WI-0020842-09-1

Permittee: Freedom Sanitary District No. 1, N4229 Garvey Ave (Freedom), Kaukauna, WI, 54130-7138

Facility Where Discharge Occurs: Freedom Sanitary District No 1, N4229 Garvey Ave., Freedom, Wisconsin

Receiving Water And Location: Duck Creek, Lower Fox River Basin, Duck Creek Watershed, NW1/4, SW1/4, Sec 11, T22N, R18E, Tn of Freedom, Outagamie Co

Brief Facility Description: The Freedom Sanitary District#1(SD) located in eastern Outagamie County, owns and operates a basic-secondary wastewater facility which was reconstructed in 1997 and upgraded in 2020 (NW1/4, SW1/4, Sec.11, T22N, R18E, Tn of Freedom). The facility has an annual average wet weather design flow of 0.402 million gallons per day (MGD) and an annual average design biochemical oxygen demand (BOD) of 551 pounds per day. The treatment facility includes; a new package septage receiving station unit in a new structure on-site, which will provide preliminary treatment of wastewater from haulers. The septage receiving station empties into a raw wastewater pump station, followed by a preliminary mechanical fine-screen for removal of floatable solids. Next are three anoxic selector tanks to aid biological phosphorus removal, followed by three extended aeration activated sludge basins, which biologically remove dissolved organic material (BOD). The two final clarifiers provide settling and removal of the biomass material formed in the activated basins. Final effluent then passes through the effluent Parshall flume for flow measurement and then into an outfall sewer. This outfall sewer flows 300 feet and discharges through outfall 001 at the east bank of Duck Creek. The Creek is classified as a Limited Forage Fishery, located in the Duck Creek Watershed (LF05) of the Lower Fox River Basin. Waste activated sludge is stabilized through removal of volatile solids in one of four, aerobic digestors, prior to discharge to the onsite sludge storage tank. Stored sludge is ultimately recycled through land application. Ferric sulfate is added as a supplemental aid to remove phosphorus and meet effluent limit.

In February 2020, the Sanitary District completed a construction project that was started in October 2018 to improve biological and chemical phosphorus removal, upgrade equipment nearing the end of its service life, improve overall treatment processes, and optimize operations. These upgrades focused on providing the Sanitary District with the means to efficiently control plant processes to comply with the final phosphorus WQBEL. Monitoring probes were added, and treatment equipment was upgraded to allow the WWTP to adjust operations based on fluctuating wastewater conditions. With these improvements, the Sanitary District can now use biological phosphorus removal as the primary phosphorus removal mechanism. Prior to the upgrades, the WWTP exclusively achieved phosphorus removal via ferric sulfate addition. Going forward, biological phosphorus removal is intended to be the primary method of phosphorus reduction with supplemental ferric sulfate addition, if needed.

Permit Drafter's Name, Address, Phone and Email: Lisa Lumley, DNR, 2984 Shawano Ave, Green Bay, WI, 54313, (920) 662-5176, [Lisal.Lumley@wisconsin.gov](mailto:Lisal.Lumley@wisconsin.gov)

Basin Engineer's Name, Address, Phone and Email: Roy Van Gheem, 2984 Shawano Avenue, Green Bay, WI 54313-6727, (920) 662-5191, [Roy.VanGheem@wisconsin.gov](mailto:Roy.VanGheem@wisconsin.gov)

Proposed Modification: Temperature limits and associated compliance schedule are proposed to be removed. Temperature monitoring required at a weekly frequency from October through December.

The Department has tentatively decided that the above specified WPDES permit should be modified.

Dissipative Cooling: The department may account for dissipative cooling of the permittee's treated domestic sewage effluent in determining the need for sub-lethal temperature limits pursuant to s. NR 106.59, Wis. Adm.Code. Based on the department's evaluation it has been determined that sub-lethal effluent limits for temperature are not necessary because the permittee's effluent thermal load is adequately dissipated. Comments on this determination are requested.

Persons wishing to comment on or object to the proposed permit action, or to request a public hearing, may write to the Department of Natural Resources at the above named permit drafter's email address. All comments or suggestions received no later than 30 days after the publication date of this public notice will be considered along with other information on file in making a final decision regarding the permit. Anyone providing comments in response to this public notice will receive a notification of the Department's final decision when the permit is issued. Where designated as a reviewable surface water discharge permit, the U.S. Environmental Protection Agency is allowed up to 90 days to submit comments or objections regarding this permit determination. If no comments are received on the proposed permit from anyone, including U.S. EPA, the permit will be issued as proposed.

The Department may schedule a public informational hearing if requested by any person and shall schedule a public informational hearing if a petition requesting a hearing is received from 5 or more persons or if response to this notice indicates significant public interest pursuant to s. 283.49, Stats. Requests for a public informational hearing

shall state the following: the name and address of the person(s) requesting the hearing; the interest in the proposed permit of the person(s) requesting the hearing; the reasons for the request; and the issues proposed to be considered at the hearing.

Information on file for this permit action, including the draft permit, fact sheet and permit application, is accessible via e-mail by contacting the above-named permit drafter's e-mail address or the above-named basin engineer's e-mail during normal business hours Monday through Friday (except holidays). Note that DNR staff have limited access to permit hard copy files during this time as they are working from home, but much of the permit file is available electronically by e-mail request. Permit information is also available on the internet at: <http://dnr.wi.gov/topic/wastewater/PublicNotices.html>. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

NAME OF PUBLISHING NEWSPAPER: Post-Crescent

ADDRESS OF PUBLISHING NEWSPAPER: 306 W Washington St., Appleton, WI 54911-4745

Date Notice Issued: January 15, 2020